UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/868,752	09/04/2001	Mark Stewart Nichols	05222.00165	6533

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EXAMINER
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ART UNIT	PAPER NUMBER
2121	

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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/868,752	NICHOLS, MARK STEWART
	Examiner	Art Unit	
	Meltin Bell	2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 July 2004 and 06 May 2004*.
2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
    closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1-18* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☒ The drawing(s) filed on *20 June 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☒ Some * c)☐ None of:
        1.☐ Certified copies of the priority documents have been received.
        2.☐ Certified copies of the priority documents have been received in Application No. _____.
        3.☒ Copies of the certified copies of the priority documents have been received in this National Stage
            application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)
1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date *5/6/04*.
4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This action is responsive to application **09/868,752** filed 09/04/2001 as well as

the Specification and Amendment filed 7/8/04. Claims 1-18 filed by the applicant have

been entered and examined. An action on the merits of claims 1-18 appears below.

Priority

Acknowledgment is made of applicant's claim for priority based on application

09/221,217 filed in the United States on **12/22/98**.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3-4, 9-10, 12-13 and 18 are rejected under 35 U.S.C. 103(a) as being

unpatentable over *Goleh* U.S. Patent Number 5,372,507 "Machine-aided tutorial

method" (December 13, 1994) in view of *Hayes et al* USPN 5,170,464 "Method for

rolling back an expert system" (December 8, 1992).

Regarding claim 1:

Goleh teaches,

- (b) integrating information that motivates accomplishment of the goal for use in the

presentation (Abstract, sentences 3-5, "Attaining the goal...comprising the subject";

column 1, lines 21-29, "upon facing a...to on-the-job training")

- (c) evaluating progress toward the goal and providing feedback that further motivates

accomplishment of the goal (column 4, lines 65-67, "The monitor 14...matter at hand";

column 9, lines 22-32, "The tutorial then...for the student"; column 11, lines 1-12,

"During this portion...the correct amounts")

- (d) managing the presentation of information around specific requirements designed to

achieve the goal (Fig. 3a, items 406, 412, 416, 420)

However, *Goleh* doesn't explicitly teach receiving, by a goal based learning system,

information indicative of a goal while *Hayes et al* teaches,

- (a) receiving, by a goal based learning system, information indicative of a goal (column

1, lines 28-36, "In backward-chaining systems, the ... sources. This procedure

continues"; column 2, lines 1-4, "until conditions can be ... original goals variables";

Figs. 7a-j; column 13, lines 23-33, "The network of FIG. 7 ... changing various rules";

column 13, lines 61-68, "the offset variable node ... as shown in FIG 7e"; column 14,

lines 3-6, "the offset rule node ... as shown in FIG. 7i"; column 14, lines 29-37, "When

backward-chaining is used ... of variable values"; column 14, lines 47-51, "In the post-

consultation phase ... rules were fired")

<u>Motivation</u> - The portions of the claimed method would have been a highly desirable

feature in this art for

- Resolving goals (*Hayes et al*, Fig. 4, items 38, 52; column 6, lines 29-34, "An

  inferencing step ... resolve a goal"; column 7, lines 1-8, "The next step ... to an

  end")

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made, to modify *Goleh* as taught by *Hayes et al* for the purpose of

resolving goals.

Regarding claim 3:

The rejection of claim 3 is similar to that for claim 1 as recited above since the stated

limitations of the claim are set forth in the references. Claim 3's limitations difference is

taught in *Goleh*:

- the requirements include limits that prohibit access to sections of the a presentation

until the goal is obtained (Abstract, A method for ... to the exited step")

Regarding claim 4:

The rejection of claim 4 is similar to that for claim 1 as recited above since the stated

limitations of the claim are set forth in the references. Claim 4's limitations difference is

taught in *Goleh*:

- limiting access to sections of the a presentation until appropriate prerequisites are

completed (Abstract, A method for ... to the exited step")

Regarding claim 9:

Goleh teaches,

- (b) integrating information that motivates accomplishment of the goal for use in the

presentation (Abstract, sentences 3-5, "Attaining the goal...comprising the subject";

column 1, lines 21-29, "upon facing a...to on-the-job training")

- (c) evaluating progress toward the goal and providing feedback that further motivates

accomplishment of the goal (column 4, lines 65-67, "The monitor 14...matter at hand";

column 9, lines 22-32, "The tutorial then...for the student"; column 11, lines 1-12,

"During this portion...the correct amounts")

- (d) managing the presentation of information around specific requirements designed to

achieve the goal (Fig. 3a, items 406, 412, 416, 420)

- the step of storing a current location for one or more students that tracks the one or

more students progress in the presentation (column 3, lines 25-51, "The present

invention...available historical references")

However, *Goleh* doesn't explicitly teach receiving, by a goal based learning system,

information indicative of a goal while *Hayes et al* teaches,

- (a) receiving, by a goal based learning system, information indicative of a goal (column

1, lines 28-36, "In backward-chaining systems, the ... sources. This procedure

continues"; column 2, lines 1-4, "until conditions can be ... original goals variables";

Figs. 7a-j; column 13, lines 23-33, "The network of FIG. 7 ... changing various rules";

column 13, lines 61-68, "the offset variable node ... as shown in FIG 7e"; column 14,

lines 3-6, "the offset rule node ... as shown in FIG. 7i"; column 14, lines 29-37, "When

backward-chaining is used ... of variable values"; column 14, lines 47-51, "In the post-

consultation phase ... rules were fired")

<u>Motivation</u> - The portions of the claimed method would have been a highly desirable

feature in this art for

- Resolving goals (*Hayes et al*, Fig. 4, items 38, 52; column 6, lines 29-34, "An

  inferencing step ... resolve a goal"; column 7, lines 1-8, "The next step ... to an

  end")

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made, to modify *Goleh* as taught by *Hayes et al* for the purpose of

resolving goals.

Regarding claim 10:

Goleh teaches,

- (a) a processor (Fig. 1, item 10)

- (b) a memory that stores information under the control of the processor (Abstract,

sentence 2, "The student is...a stated goal"; Abstract, sentence 6, "The student is...the

exited step")

- (c) logic that receives information indicative of a goal

- (d) logic that integrates information that motivates accomplishment of the goal for use

in the presentation (Abstract, sentences 3-5, "Attaining the goal...comprising the

subject"; column 1, lines 21-29, "upon facing a...to on-the-job training")

- (e) logic that evaluates progress toward the goal and providing feedback that further

motivates accomplishment of the goal (column 4, lines 65-67, "The monitor 14...matter

at hand"; column 9, lines 22-32, "The tutorial then...for the student"; column 11, lines 1-

12, "During this portion...the correct amounts")

- (f) logic that manages the presentation of information around specific requirements

designed to achieve the goal (Fig. 3a, items 406, 412, 416, 420)

However, *Goleh* doesn't explicitly teach logic that receives information indicative of a

goal while *Hayes et al* teaches,

- logic that receives information indicative of a goal (column 1, lines 28-36, "In

backward-chaining systems, the ... sources. This procedure continues"; column 2, lines

1-4, "until conditions can be ... original goals variables"; Figs. 7a-j; column 13, lines 23-

33, "The network of FIG. 7 ... changing various rules"; column 13, lines 61-68, "the

offset variable node ... as shown in FIG 7e"; column 14, lines 3-6, "the offset rule node

... as shown in FIG. 7i"; column 14, lines 29-37, "When backward-chaining is used ... of

variable values"; column 14, lines 47-51, "In the post-consultation phase ... rules were

fired")

Motivation - The portions of the claimed apparatus would have been a highly desirable

feature in this art for

- Resolving goals (*Hayes et al*, Fig. 4, items 38, 52; column 6, lines 29-34, "An

  inferencing step ... resolve a goal"; column 7, lines 1-8, "The next step ... to an

  end")

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made, to modify *Goleh* as taught by *Hayes et al* for the purpose of

resolving goals.

Regarding claim 12:

The rejection of claim 12 is similar to that for claim 10 as recited above since the stated limitations of the claim are set forth in the references. Claim 12's limitations difference is taught in *Goleh*:

- the requirements include limits that prohibit access to sections of the a presentation until the goal is obtained (Abstract, A method for ... to the exited step")

Regarding claim 13:

The rejection of claim 13 is similar to that for claim 10 as recited above since the stated limitations of the claim are set forth in the references. Claim 13's limitations difference is taught in *Goleh*:

- limiting access to sections of the a presentation until appropriate prerequisites are completed (Abstract, A method for ... to the exited step")

Regarding claim 18:

Goleh teaches,

- (a) a processor (Fig. 1, item 10)

- (b) a memory that stores information under the control of the processor (Abstract, sentence 2, "The student is... a stated goal"; Abstract, sentence 6, "The student is... the exited step")

- (c) logic that receives information indicative of a goal

- (d) logic that integrates information that motivates accomplishment of the goal for use in the presentation (Abstract, sentences 3-5, "Attaining the goal... comprising the subject"; column 1, lines 21-29, "upon facing a... to on-the-job training")

- (e) logic that evaluates progress toward the goal and providing feedback that further

motivates accomplishment of the goal (column 4, lines 65-67, "The monitor 14...matter

at hand"; column 9, lines 22-32, "The tutorial then...for the student"; column 11, lines 1-

12, "During this portion...the correct amounts")

- (f) logic that manages the presentation of information around specific requirements

designed to achieve the goal (Fig. 3a, items 406, 412, 416, 420)

- logic that stores a current location for one or more students that tracks the one or more

students progress in the presentation (column 3, lines 25-51, "The present

invention...available historical references")

However, *Goleh* doesn't explicitly teach logic that receives information indicative of a

goal while *Hayes et al* teaches,

- logic that receives information indicative of a goal (column 1, lines 28-36, "In

backward-chaining systems, the ... sources. This procedure continues"; column 2, lines

1-4, "until conditions can be ... original goals variables"; Figs. 7a-j; column 13, lines 23-

33, "The network of FIG. 7 ... changing various rules"; column 13, lines 61-68, "the

offset variable node ... as shown in FIG 7e"; column 14, lines 3-6, "the offset rule node

... as shown in FIG. 7i"; column 14, lines 29-37, "When backward-chaining is used ... of

variable values"; column 14, lines 47-51, "In the post-consultation phase ... rules were

fired")

Motivation - The portions of the claimed apparatus would have been a highly desirable

feature in this art for

- • Resolving goals (*Hayes et al*, Fig. 4, items 38, 52; column 6, lines 29-34, "An

  inferencing step ... resolve a goal"; column 7, lines 1-8, "The next step ... to an

  end")

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made, to modify *Goleh* as taught by *Hayes et al* for the purpose of

resolving goals.

Claims 2, 5-8, 11 and 14-17 are rejected under 35 U.S.C. 103(a) as being

unpatentable over *Goleh* in view of *Hayes et al* and in further view of *Cook et al*

W.I.P.O. International Publication Number WO 97/44766 A1 "AGENT BASED

INSTRUCTION SYSTEM AND METHOD" (November 27, 1997).

Regarding claim 2:

Goleh teaches,

- (b) integrating information that motivates accomplishment of the goal for use in the

presentation (Abstract, sentences 3-5, "Attaining the goal...comprising the subject";

column 1, lines 21-29, "upon facing a...to on-the-job training")

- (c) evaluating progress toward the goal and providing feedback that further motivates

accomplishment of the goal (column 4, lines 65-67, "The monitor 14...matter at hand";

column 9, lines 22-32, "The tutorial then...for the student"; column 11, lines 1-12,

"During this portion...the correct amounts")

- (d) managing the presentation of information around specific requirements designed to

achieve the goal (Fig. 3a, items 406, 412, 416, 420)

However, *Goleh* doesn't explicitly teach receiving, by a goal based learning system,

information indicative of a goal or the requirements include direct linkages to remedial

education presentations while *Hayes et al* teaches,

- (a) receiving, by a goal based learning system, information indicative of a goal (column

1, lines 28-36, "In backward-chaining systems, the ... sources. This procedure

continues"; column 2, lines 1-4, "until conditions can be ... original goals variables";

Figs. 7a-j; column 13, lines 23-33, "The network of FIG. 7 ... changing various rules";

column 13, lines 61-68, "the offset variable node ... as shown in FIG 7e"; column 14,

lines 3-6, "the offset rule node ... as shown in FIG. 7i"; column 14, lines 29-37, "When

backward-chaining is used ... of variable values"; column 14, lines 47-51, "In the post-

consultation phase ... rules were fired")

Cook et al teaches,

- the requirements include direct linkages to remedial education presentations (page 20,

lines 10-12, "in case of...or remediation materials"; page 86, Table 2B)

<u>Motivation</u> - The portions of the claimed method would have been a highly desirable

feature in this art for

- Resolving goals (*Hayes et al*, Fig. 4, items 38, 52; column 6, lines 29-34, "An

  inferencing step ... resolve a goal"; column 7, lines 1-8, "The next step ... to an

  end")

- Individualizing student instruction (*Cook et al*, Abstract, sentence 1, "This

  invention relates ... computer assisted instruction")

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made, to modify *Goleh* as taught by *Hayes et al* and *Cook et al* for the

purpose of resolving goals and individualizing student instruction.

Regarding claim 5:

Goleh teaches,

- (b) integrating information that motivates accomplishment of the goal for use in the

presentation (Abstract, sentences 3-5, "Attaining the goal... comprising the subject";

column 1, lines 21-29, "upon facing a... to on-the-job training")

- (c) evaluating progress toward the goal and providing feedback that further motivates

accomplishment of the goal (column 4, lines 65-67, "The monitor 14... matter at hand";

column 9, lines 22-32, "The tutorial then... for the student"; column 11, lines 1-12,

"During this portion... the correct amounts")

- (d) managing the presentation of information around specific requirements designed to

achieve the goal (Fig. 3a, items 406, 412, 416, 420)

However, *Goleh* doesn't explicitly teach receiving, by a goal based learning system,

information indicative of a goal or the step of providing feedback that identifies a

navigation path for a student based on the goal while *Hayes et al* teaches,

- (a) receiving, by a goal based learning system, information indicative of a goal (column

1, lines 28-36, "In backward-chaining systems, the ... sources. This procedure

continues"; column 2, lines 1-4, "until conditions can be ... original goals variables";

Figs. 7a-j; column 13, lines 23-33, "The network of FIG. 7 ... changing various rules";

column 13, lines 61-68, "the offset variable node ... as shown in FIG 7e"; column 14,

lines 3-6, "the offset rule node ... as shown in FIG. 7i"; column 14, lines 29-37, "When

backward-chaining is used ... of variable values"; column 14, lines 47-51, "In the post-

consultation phase ... rules were fired")

Cook et al teaches,

- the step of providing feedback that identifies a navigation path for a student based on

the goal (page 69, lines 23-35, "the designer defines...of retry outcome")

<u>Motivation</u> - The portions of the claimed method would have been a highly desirable

feature in this art for

- Resolving goals (*Hayes et al*, Fig. 4, items 38, 52; column 6, lines 29-34, "An

  inferencing step ... resolve a goal"; column 7, lines 1-8, "The next step ... to an

  end")

- Individualizing student instruction (*Cook et al*, Abstract, sentence 1, "This

  invention relates ... computer assisted instruction")

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made, to modify *Goleh* as taught by *Hayes et al* and *Cook et al* for the

purpose of resolving goals and individualizing student instruction.

Regarding claim 6:

Goleh teaches,

- (b) integrating information that motivates accomplishment of the goal for use in the

presentation (Abstract, sentences 3-5, "Attaining the goal...comprising the subject";

column 1, lines 21-29, "upon facing a...to on-the-job training")

- (c) evaluating progress toward the goal and providing feedback that further motivates

accomplishment of the goal (column 4, lines 65-67, "The monitor 14...matter at hand";

column 9, lines 22-32, "The tutorial then...for the student"; column 11, lines 1-12,

"During this portion...the correct amounts")

- (d) managing the presentation of information around specific requirements designed to

achieve the goal (Fig. 3a, items 406, 412, 416, 420)

However, *Goleh* doesn't explicitly teach receiving, by a goal based learning system,

information indicative of a goal or utilizing a student identifier to control access to

appropriate presentation material while *Hayes et al* teaches,

- (a) receiving, by a goal based learning system, information indicative of a goal (column

1, lines 28-36, "In backward-chaining systems, the ... sources. This procedure

continues"; column 2, lines 1-4, "until conditions can be ... original goals variables";

Figs. 7a-j; column 13, lines 23-33, "The network of FIG. 7 ... changing various rules";

column 13, lines 61-68, "the offset variable node ... as shown in FIG 7e"; column 14,

lines 3-6, "the offset rule node ... as shown in FIG. 7i"; column 14, lines 29-37, "When

backward-chaining is used ... of variable values"; column 14, lines 47-51, "In the post-

consultation phase ... rules were fired")

Cook et al teaches,

- utilizing a student identifier to control access to appropriate presentation material

(page 32, lines 33-37, "The executive software...for this student"; page 43, lines 18-37,

"5.2.4 ABI System Security ... based on a user's"; page 44, lines 1-32, "password. For

example ... possible security violations"; page 99, lines 12-33, "Figs. 10A, 10B and ...

past agent behaviors")

Motivation - The portions of the claimed method would have been a highly desirable

feature in this art for

- Resolving goals (*Hayes et al*, Fig. 4, items 38, 52; column 6, lines 29-34, "An

  inferencing step ... resolve a goal"; column 7, lines 1-8, "The next step ... to an

  end")

- Individualizing student instruction (*Cook et al*, Abstract, sentence 1, "This

  invention relates ... computer assisted instruction")

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made, to modify *Goleh* as taught by *Hayes et al* and *Cook et al* for the

purpose of resolving goals and individualizing student instruction.

Regarding claim 7:

Goleh teaches,

- (b) integrating information that motivates accomplishment of the goal for use in the

presentation (Abstract, sentences 3-5, "Attaining the goal... comprising the subject";

column 1, lines 21-29, "upon facing a... to on-the-job training")

- (c) evaluating progress toward the goal and providing feedback that further motivates

accomplishment of the goal (column 4, lines 65-67, "The monitor 14... matter at hand";

column 9, lines 22-32, "The tutorial then... for the student"; column 11, lines 1-12,

"During this portion... the correct amounts")

- (d) managing the presentation of information around specific requirements designed to

achieve the goal (Fig. 3a, items 406, 412, 416, 420)

However, *Goleh* doesn't explicitly teach receiving, by a goal based learning system,

information indicative of a goal or each item in the presentation is assigned an identifier

to provide a level of granularity for restrictive access to presentation material while

Hayes et al teaches,

- (a) receiving, by a goal based learning system, information indicative of a goal (column

1, lines 28-36, "In backward-chaining systems, the ... sources. This procedure

continues"; column 2, lines 1-4, "until conditions can be ... original goals variables";

Figs. 7a-j; column 13, lines 23-33, "The network of FIG. 7 ... changing various rules";

column 13, lines 61-68, "the offset variable node ... as shown in FIG 7e"; column 14,

lines 3-6, "the offset rule node ... as shown in FIG. 7i"; column 14, lines 29-37, "When

backward-chaining is used ... of variable values"; column 14, lines 47-51, "In the post-

consultation phase ... rules were fired")

Cook et al teaches,

- each item in the presentation is assigned an identifier (page 48, lines 28-33, "To

facilitate metering... elements is metered") to provide a level of granularity for restrictive

access to presentation material (page 43, lines 18-37, "5.2.4 ABI System Security ...

based on a user's"; page 44, lines 1-32, "password. For example ... possible security

violations"; page 99, lines 12-33, "Figs. 10A, 10B and ... past agent behaviors")

Motivation - The portions of the claimed method would have been a highly desirable

feature in this art for

- Resolving goals (*Hayes et al*, Fig. 4, items 38, 52; column 6, lines 29-34, "An

    inferencing step ... resolve a goal"; column 7, lines 1-8, "The next step ... to an

    end")

- Individualizing student instruction (*Cook et al*, Abstract, sentence 1, "This

    invention relates ... computer assisted instruction")

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made, to modify *Goleh* as taught by *Hayes et al* and *Cook et al* for the

purpose of resolving goals and individualizing student instruction.

Regarding claim 8:

Goleh teaches,

- (b) integrating information that motivates accomplishment of the goal for use in the

presentation (Abstract, sentences 3-5, "Attaining the goal...comprising the subject";

column 1, lines 21-29, "upon facing a...to on-the-job training")

- (c) evaluating progress toward the goal and providing feedback that further motivates

accomplishment of the goal (column 4, lines 65-67, "The monitor 14...matter at hand";

column 9, lines 22-32, "The tutorial then...for the student"; column 11, lines 1-12,

"During this portion...the correct amounts")

- (d) managing the presentation of information around specific requirements designed to

achieve the goal (Fig. 3a, items 406, 412, 416, 420)

However, *Goleh* doesn't explicitly teach receiving, by a goal based learning system,

information indicative of a goal or each activity associated with a presentation is

identified to provide a level of granularity for restrictive access to the activity while

Hayes et al teaches,

- (a) receiving, by a goal based learning system, information indicative of a goal (column

1, lines 28-36, "In backward-chaining systems, the ... sources. This procedure

continues"; column 2, lines 1-4, "until conditions can be ... original goals variables";

Figs. 7a-j; column 13, lines 23-33, "The network of FIG. 7 ... changing various rules";

column 13, lines 61-68, "the offset variable node ... as shown in FIG 7e"; column 14,

lines 3-6, "the offset rule node ... as shown in FIG. 7i"; column 14, lines 29-37, "When

backward-chaining is used ... of variable values"; column 14, lines 47-51, "In the post-

consultation phase ... rules were fired")

Cook et al teaches,

- each activity associated with a presentation is identified to provide a level of

granularity for restrictive access to the activity (page 35, lines 2-10, "before allowing

downloaded ... common server systems"; page 46, lines 1-12, "If they do... caught and

rejected"; page 90, lines 11-35, "this data includes... by the student"; page 102, lines 14-

37, "The student data... occurring too frequently")

Motivation - The portions of the claimed method would have been a highly desirable

feature in this art for

- Resolving goals (*Hayes et al*, Fig. 4, items 38, 52; column 6, lines 29-34, "An

    inferencing step ... resolve a goal"; column 7, lines 1-8, "The next step ... to an

    end")

- Individualizing student instruction (*Cook et al*, Abstract, sentence 1, "This

  invention relates ... computer assisted instruction")

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made, to modify *Goleh* as taught by *Hayes et al* and *Cook et al* for the

purpose of resolving goals and individualizing student instruction.

Regarding claim 11:

Goleh teaches,

- (a) a processor (Fig. 1, item 10)

- (b) a memory that stores information under the control of the processor (Abstract,

sentence 2, "The student is...a stated goal"; Abstract, sentence 6, "The student is...the

exited step")

- (c) logic that receives information indicative of a goal

- (d) logic that integrates information that motivates accomplishment of the goal for use

in the presentation (Abstract, sentences 3-5, "Attaining the goal...comprising the

subject"; column 1, lines 21-29, "upon facing a...to on-the-job training")

- (e) logic that evaluates progress toward the goal and providing feedback that further

motivates accomplishment of the goal (column 4, lines 65-67, "The monitor 14...matter

at hand"; column 9, lines 22-32, "The tutorial then...for the student"; column 11, lines 1-

12, "During this portion...the correct amounts")

- (f) logic that manages the presentation of information around specific requirements

designed to achieve the goal (Fig. 3a, items 406, 412, 416, 420)

However, *Goleh* doesn't explicitly teach logic that receives information indicative of a

goal or the requirements include direct linkages to remedial education presentations

while *Hayes et al* teaches,

- logic that receives information indicative of a goal (column 1, lines 28-36, "In

backward-chaining systems, the ... sources. This procedure continues"; column 2, lines

1-4, "until conditions can be ... original goals variables"; Figs. 7a-j; column 13, lines 23-

33, "The network of FIG. 7 ... changing various rules"; column 13, lines 61-68, "the

offset variable node ... as shown in FIG 7e"; column 14, lines 3-6, "the offset rule node

... as shown in FIG. 7i"; column 14, lines 29-37, "When backward-chaining is used ... of

variable values"; column 14, lines 47-51, "In the post-consultation phase ... rules were

fired")

Cook et al teaches,

- the requirements include direct linkages to remedial education presentations (page 20,

lines 10-12, "in case of... or remediation materials" ; page 86, Table 2B)

Motivation - The portions of the claimed apparatus would have been a highly desirable

feature in this art for

- Resolving goals (*Hayes et al*, Fig. 4, items 38, 52; column 6, lines 29-34, "An

  inferencing step ... resolve a goal"; column 7, lines 1-8, "The next step ... to an

  end")

- Individualizing student instruction (*Cook et al*, Abstract, sentence 1, "This

  invention relates ... computer assisted instruction")

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made, to modify *Goleh* as taught by *Hayes et al* and *Cook et al* for the

purpose of resolving goals and individualizing student instruction.

Regarding claim 14:

Goleh teaches,

- (a) a processor (Fig. 1, item 10)

- (b) a memory that stores information under the control of the processor (Abstract,

sentence 2, "The student is...a stated goal"; Abstract, sentence 6, "The student is...the

exited step")

- (c) logic that receives information indicative of a goal

- (d) logic that integrates information that motivates accomplishment of the goal for use

in the presentation (Abstract, sentences 3-5, "Attaining the goal...comprising the

subject"; column 1, lines 21-29, "upon facing a...to on-the-job training")

- (e) logic that evaluates progress toward the goal and providing feedback that further

motivates accomplishment of the goal (column 4, lines 65-67, "The monitor 14...matter

at hand"; column 9, lines 22-32, "The tutorial then...for the student"; column 11, lines 1-

12, "During this portion...the correct amounts")

- (f) logic that manages the presentation of information around specific requirements

designed to achieve the goal (Fig. 3a, items 406, 412, 416, 420)

However, *Goleh* doesn't explicitly teach logic that receives information indicative of a

goal or logic that provides feedback that identifies a navigation path for a student based

on the goal while *Hayes et al* teaches,

- logic that receives information indicative of a goal (column 1, lines 28-36, "In

backward-chaining systems, the ... sources. This procedure continues"; column 2, lines

1-4, "until conditions can be ... original goals variables"; Figs. 7a-j; column 13, lines 23-

33, "The network of FIG. 7 ... changing various rules"; column 13, lines 61-68, "the

offset variable node ... as shown in FIG 7e"; column 14, lines 3-6, "the offset rule node

... as shown in FIG. 7i"; column 14, lines 29-37, "When backward-chaining is used ... of

variable values"; column 14, lines 47-51, "In the post-consultation phase ... rules were

fired")

Cook et al teaches,

- logic that provides feedback that identifies a navigation path for a student based on the

goal (page 69, lines 23-35, "the designer defines...of retry outcome")

Motivation - The portions of the claimed apparatus would have been a highly desirable

feature in this art for

- Resolving goals (*Hayes et al*, Fig. 4, items 38, 52; column 6, lines 29-34, "An

  inferencing step ... resolve a goal"; column 7, lines 1-8, "The next step ... to an

  end")

- Individualizing student instruction (*Cook et al*, Abstract, sentence 1, "This

  invention relates ... computer assisted instruction")

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made, to modify *Goleh* as taught by *Hayes et al* and *Cook et al* for the

purpose of resolving goals and individualizing student instruction.

Regarding claim 15:

Goleh teaches,

- (a) a processor (Fig. 1, item 10)

- (b) a memory that stores information under the control of the processor (Abstract,

sentence 2, "The student is...a stated goal"; Abstract, sentence 6, "The student is...the

exited step")

- (c) logic that receives information indicative of a goal

- (d) logic that integrates information that motivates accomplishment of the goal for use

in the presentation (Abstract, sentences 3-5, "Attaining the goal...comprising the

subject"; column 1, lines 21-29, "upon facing a...to on-the-job training")

- (e) logic that evaluates progress toward the goal and providing feedback that further

motivates accomplishment of the goal (column 4, lines 65-67, "The monitor 14...matter

at hand"; column 9, lines 22-32, "The tutorial then...for the student"; column 11, lines 1-

12, "During this portion...the correct amounts")

- (f) logic that manages the presentation of information around specific requirements

designed to achieve the goal (Fig. 3a, items 406, 412, 416, 420)

However, *Goleh* doesn't explicitly teach logic that receives information indicative of a

goal or logic that utilizes a student identifier to control access to appropriate

presentation material while *Hayes et al* teaches,

- logic that receives information indicative of a goal (column 1, lines 28-36, "In

backward-chaining systems, the ... sources. This procedure continues"; column 2, lines

1-4, "until conditions can be ... original goals variables"; Figs. 7a-j; column 13, lines 23-

33, "The network of FIG. 7 ... changing various rules"; column 13, lines 61-68, "the

offset variable node ... as shown in FIG 7e"; column 14, lines 3-6, "the offset rule node

... as shown in FIG. 7i"; column 14, lines 29-37, "When backward-chaining is used ... of

variable values"; column 14, lines 47-51, "In the post-consultation phase ... rules were

fired")

Cook et al teaches,

- logic that utilizes a student identifier to control access to appropriate presentation

material (page 32, lines 33-37, "The executive software...for this student"; page 43,

lines 18-37, "5.2.4 ABI System Security ... based on a user's"; page 44, lines 1-32,

"password. For example ... possible security violations"; page 99, lines 12-33, "Figs.

10A, 10B and ... past agent behaviors")

<u>Motivation</u> - The portions of the claimed apparatus would have been a highly desirable

feature in this art for

- Resolving goals (*Hayes et al*, Fig. 4, items 38, 52; column 6, lines 29-34, "An

  inferencing step ... resolve a goal"; column 7, lines 1-8, "The next step ... to an

  end")

- Individualizing student instruction (*Cook et al*, Abstract, sentence 1, "This

  invention relates ... computer assisted instruction")

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made, to modify *Goleh* as taught by *Hayes et al* and *Cook et al* for the

purpose of resolving goals and individualizing student instruction.

Regarding claim 16:

Goleh teaches,

- (a) a processor (Fig. 1, item 10)

- (b) a memory that stores information under the control of the processor (Abstract,

sentence 2, "The student is...a stated goal"; Abstract, sentence 6, "The student is...the

exited step")

- (c) logic that receives information indicative of a goal

- (d) logic that integrates information that motivates accomplishment of the goal for use

in the presentation (Abstract, sentences 3-5, "Attaining the goal...comprising the

subject"; column 1, lines 21-29, "upon facing a...to on-the-job training")

- (e) logic that evaluates progress toward the goal and providing feedback that further

motivates accomplishment of the goal (column 4, lines 65-67, "The monitor 14...matter

at hand"; column 9, lines 22-32, "The tutorial then...for the student"; column 11, lines 1-

12, "During this portion...the correct amounts")

- (f) logic that manages the presentation of information around specific requirements

designed to achieve the goal (Fig. 3a, items 406, 412, 416, 420)

However, *Goleh* doesn't explicitly teach logic that receives information indicative of a

goal or each item in the presentation is assigned an identifier to provide a level of

granularity for restrictive access to presentation material while *Hayes et al* teaches,

- logic that receives information indicative of a goal (column 1, lines 28-36, "In

backward-chaining systems, the ... sources. This procedure continues"; column 2, lines

1-4, "until conditions can be ... original goals variables"; Figs. 7a-j; column 13, lines 23-

33, "The network of FIG. 7 ... changing various rules"; column 13, lines 61-68, "the

offset variable node ... as shown in FIG 7e"; column 14, lines 3-6, "the offset rule node

... as shown in FIG. 7i"; column 14, lines 29-37, "When backward-chaining is used ... of

variable values"; column 14, lines 47-51, "In the post-consultation phase ... rules were

fired")

Cook et al teaches,

- each item in the presentation is assigned an identifier (page 48, lines 28-33, "To

facilitate metering... elements is metered") to provide a level of granularity for restrictive

access to presentation material (page 43, lines 18-37, "5.2.4 ABI System Security ...

based on a user's"; page 44, lines 1-32, "password. For example ... possible security

violations"; page 99, lines 12-33, "Figs. 10A, 10B and ... past agent behaviors")

Motivation - The portions of the claimed apparatus would have been a highly desirable

feature in this art for

- Resolving goals (*Hayes et al*, Fig. 4, items 38, 52; column 6, lines 29-34, "An

  inferencing step ... resolve a goal"; column 7, lines 1-8, "The next step ... to an

  end")

- Individualizing student instruction (*Cook et al*, Abstract, sentence 1, "This

  invention relates ... computer assisted instruction")

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made, to modify *Goleh* as taught by *Hayes et al* and *Cook et al* for the

purpose of resolving goals and individualizing student instruction.

Regarding claim 17:

Goleh teaches,

- (a) a processor (Fig. 1, item 10)

- (b) a memory that stores information under the control of the processor (Abstract,

sentence 2, "The student is...a stated goal"; Abstract, sentence 6, "The student is...the

exited step")

- (c) logic that receives information indicative of a goal

- (d) logic that integrates information that motivates accomplishment of the goal for use

in the presentation (Abstract, sentences 3-5, "Attaining the goal...comprising the

subject"; column 1, lines 21-29, "upon facing a...to on-the-job training")

- (e) logic that evaluates progress toward the goal and providing feedback that further

motivates accomplishment of the goal (column 4, lines 65-67, "The monitor 14...matter

at hand"; column 9, lines 22-32, "The tutorial then...for the student"; column 11, lines 1-

12, "During this portion...the correct amounts")

- (f) logic that manages the presentation of information around specific requirements

designed to achieve the goal (Fig. 3a, items 406, 412, 416, 420)

However, *Goleh* doesn't explicitly teach logic that receives information indicative of a

goal or each activity associated with a presentation is identified to provide a level of

granularity for restrictive access to the activity while *Hayes et al* teaches,

- logic that receives information indicative of a goal (column 1, lines 28-36, "In

backward-chaining systems, the ... sources. This procedure continues"; column 2, lines

1-4, "until conditions can be ... original goals variables"; Figs. 7a-j; column 13, lines 23-

33, "The network of FIG. 7 ... changing various rules"; column 13, lines 61-68, "the

offset variable node ... as shown in FIG 7e"; column 14, lines 3-6, "the offset rule node

... as shown in FIG. 7i"; column 14, lines 29-37, "When backward-chaining is used ... of

variable values"; column 14, lines 47-51, "In the post-consultation phase ... rules were

fired")

Cook et al teaches,

- each activity associated with a presentation is identified to provide a level of

granularity for restrictive access to the activity (page 35, lines 2-10, "before allowing

downloaded ... common server systems"; page 46, lines 1-12, "If they do... caught and

rejected"; page 90, lines 11-35, "this data includes... by the student"; page 102, lines 14-

37, "The student data... occurring too frequently")

Motivation - The portions of the claimed apparatus would have been a highly desirable

feature in this art for

- Resolving goals (*Hayes et al*, Fig. 4, items 38, 52; column 6, lines 29-34, "An

  inferencing step ... resolve a goal"; column 7, lines 1-8, "The next step ... to an

  end")

- Individualizing student instruction (*Cook et al*, Abstract, sentence 1, "This

  invention relates ... computer assisted instruction")

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made, to modify *Goleh* as taught by *Hayes et al* and *Cook et al* for the

purpose of resolving goals and individualizing student instruction.

RESPONSE TO APPLICANTS' AMENDMENT REMARKS

Information Disclosure Statement (IDS)

Applicant(s) argue(s) that the second IDS filed 5/6/04 contains the dates of

publication for all submitted references for addressing earlier objections (Amendment

REMARKS page 7, paragraph). The second IDS has been entered and examined.

The examiner notes the "CAPTOR a model for delivering web based intelligent tutoring

system technology" reference's copyright year as 2000 from the document and missing

from the second IDS listing. The objections to the IDS are withdrawn.

Drawings, Specification

Applicant(s) argue(s) that Fig. 2 is not modified because of the specification

amendment at page 3, line 40 deleting reference to item 234 and that the amendments

to page 3, line 32 to page 4, line 4 are consistent with what is shown in Fig. 2, items

230, 250, 270, 240, 242 and 238 (Amendment REMARKS page 7, paragraphs 4-6).

The amendments to the specification have been entered and examined. Applicant's

arguments have been fully considered and are persuasive. The objections to the

specification and drawings are withdrawn.

Claim Objections

Applicant(s) argue(s) that amended claims 3-4, 8, 10, 12-13 and 17 overcome

the earlier objections: replacing 'a presentation' with 'the presentation' for claims 3-4, 8,

12-13 and 17 and reordering the letter designation of claim 10 features (Amendment

REMARKS page 8, paragraph 2). Applicant's arguments have been fully considered

and are persuasive. The objections to claims 3-4, 8, 10, 12-13 and 17 are withdrawn.

Claim Rejections - 35 USC § 101

Applicant(s) argue(s) that the amendments to claims 1-9 justify reconsideration of

the 35 USC 101 rejection of claim 1 (Amendment REMARKS page 8, paragraph 3).

Applicant's arguments have been fully considered and are persuasive. The 35 USC

101 rejection of claim 1 has been withdrawn.

Claim Rejections - 35 USC § 102

Applicant(s) argue(s) that Goleh USPN 5,372,507 does not teach receiving by a

goal based learning system information indicative of a goal or limiting access to sections

of the presentation until appropriate prerequisites are completed in the 35 USC 102

rejection of claims 1, 3-4, 9-10, 12-13 and 18 (Amendment REMARKS page 8,

paragraph 4). The examiner agrees that Goleh does not teach receiving by a goal

based learning system information indicative of a goal. However, limiting access to

sections of the presentation until appropriate prerequisites are completed is taught in

Goleh's Abstract while Hayes USPN 5,170,464 is cited individually and in combination

with Goleh for explicitly and inherently disclosing receiving by a goal based learning

system information indicative of a goal. Further, Fig. 4, items 38, 52, column 6, lines

29-34 and column 7, lines 1-8 provide resolving goals as the purpose for modifying

Goleh as taught by Hayes.

Applicant(s) argue(s) that claims 12-13 and 18 are not anticipated by Goleh for

the same reasons given in the claims 1, 3-4, 9-10, 12-13 and 18 arguments

(Amendment REMARKS page 9, paragraph 2). Applicant's arguments have been

considered but are moot in view of the new ground(s) of rejection.

Applicant(s) argue(s) that Cook W.I.P.O WO 97/44766 does not teach receiving

by a goal based learning system information indicative of a goal (Amendment

REMARKS page 9, paragraph 3) or logic that receives information indicative of a goal

(Amendment REMARKS page 10, paragraph 2) in the 35 USC 102 rejections of claims

2, 5-8, 11 and 14-17. The examiner agrees that Goleh does not teach these limitations.

However, Hayes USPN 5,170,464 is cited individually and in combination with Goleh for

explicitly and inherently disclosing receiving by a goal based learning system

information indicative of a goal. Further, Fig. 4, items 38, 52, column 6, lines 29-34 and

column 7, lines 1-8 provide resolving goals as the purpose for modifying Goleh as

taught by Hayes.

Applicant(s) argue(s) that Cook W.I.P.O WO 97/44766 does not teach the feature

of each item in the presentation is assigned an identifier to provide a level of granularity

for restrictive access to presentation material in the 35 USC 102 rejection of claims 7,

11 and 14-17 (Amendment REMARKS page 9, paragraph 4 and page 10, paragraph 1-

2). Applicant's arguments have been fully considered but they are not persuasive.

Applicants' arguments are not agreed with as Cook discloses the subject matter set

forth in the applicants' claims on page 48, lines 28-33, page 43, lines 18-37, page 44, lines 1-32 and page 99, lines 12-33.

As set forth above with regards to Goleh, Cook and Hayes, the items listed explicitly and inherently teach each element of the applicants' claimed limitations. Applicants have not set forth any distinction or offered any dispute between the claims of the subject application, Goleh's Machine-aided tutorial method, Cook's AGENT BASED INSTRUCTION SYSTEM AND METHOD and Hayes' Method for rolling back an expert system.

Conclusion

Any inquiry concerning this communication or earlier communications from the Office should be directed to Meltin Bell whose telephone number is 571-272-3680. This Examiner can normally be reached on Mon - Fri 7:30 am - 4:30 pm.

If attempts to reach this Examiner by telephone are unsuccessful, his supervisor, Anthony Knight, can be reached on 571-272-3687. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

MB

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